

TRANSMITTAL

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Application Number	09/800,435	
Filing Date	March 5, 2001	
First Named Inventor	Stephen R. Quake	**************************************
Art Unit	1631	
Examiner Name	Channing Mahatan	
Attorney Docket Number	20174C-012300US	

FORM (to be used for all correspondence after initial filing) Total Number of Pages in This Submission

		ENCLOSURES (Che	ck all that appl	y) .		
Fee Trans	mittal Form	Drawing(s)		After Allowance Communication to TC		
, Fe	ee Attached	Licensing-related Paper	ers	Appeal Communication to Board of Appeals and Interferences		
Extension Express A Informatio Certified C Document Reply to M Application Re	ter Final fidavits/declaration(s) of Time Request bandonment Request n Disclosure Statement copy of Priority (s)	Petition Petition to Convert to a Provisional Application Power of Attorney, Rev Change of Correspond Terminal Disclaimer Request for Refund CD, Number of CD(s) Landscape Tab Remarks The Commiss Account 20-1	vocation ence Address le on CD sioner is author	Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below): SB/08 147 References Return Postcard		
	SIGNA	TURE OF APPLICANT, A	TTORNEY,	OR AGENT		
Firm Name	Townsend and Town	send and Crew LLP				
Signature	Patch 80		· ·			
Printed name	Patrick M. Boucher					
Date	February 9, 2006		Reg. No.	44,037		
CERTIFICATE OF TRANSMISSION/MAILING						
				ice with sufficient postage as first class mail in an Alexandria, VA 22313-1450, on the date shown		
Signature	Janeto	P. Dewmater				

Signature	Janet & Newmader	<u></u>	
Typed or printed name	Janet L. Newmaker	Date	February 9, 2006

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to

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February 9, 2006

TOWNSEND and TOWNSEND and CREW LLP

PATENT

Attorney Docket No.: 20174C-012300US Client Reference Nos.: CIT 3176 and

C112.210.US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

FEB 1 3 2001

In re application of:

Stephen R. Quake et al.

Application No.: 09/800,435

Filed: March 5, 2001

For: Combinatorial Array For Nucleic

Acid Analysis

Customer No.: 20350

Confirmation No.: 2542

Examiner:

Channing Mahatan

Art Unit:

1631

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.97 AND 1.98

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references (in compliance with the requirements of 37 CFR §1.98(a)(2)) are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

PATENT

Stephen R. Quake et al.

Application No.: 09/800,435

Page 2

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicants believe that <u>no fee is required</u> for submission of this statement. If a fee is required, however, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Date: February 9, 2006

Patrick M. Boucher Reg. No. 44,037

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, Eighth Floor San Francisco, CA 94111-3834

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303-571-4000

Fax: 415-576-0300 PMB/jln

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Substitute for form 1449A/PTO				Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	09/800,435	
			SCLOSURE	Filing Date	March 5, 2001	
			PPLICANT	First Named Inventor	Stephen R. Quake	
	•		Art Unit	1631		
	(use as many she	eets as	necessary)	Examiner Name	Channing Mahatan	
Sheet	1	of.	15	Attorney Docket Number	.20174C-012300US	

			U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US-2,656,508	10-20-1953	Coulter	
	A2	US-3,560,754	02-02-1971	Kamentsky	
	А3	US-3,570,515	03-16-1971	Kinner	•
	A4	US-3,747,628	07-24-1973	Holster et al.	
	A5 ·	US-4,046,159	09-06-1977	Pegourie	
	A6	US-4,119,368	10-10-1978	Yamakazi	
	A7	US-4,153,855	05-08-1979	Feingold	
	A8	US-4,245,673	01-20-1981	Bouteille et al.	
	A9	US-4,434,704	03-06-1984	Surjaatmadja	
	A10	US-4,581,624	04-08-1986	O'Connor	
	A11	US-4,585,209	04-29-1986	Aine et al.	
	A12	US-4,675,300	06-23-1987	Zare et al.	
	A13	US-4,786,165	11-22-1988	Yamamoto et al.	77.11-11
-	A14	US-4,898,582	02-06-1990	Faste	
	A15	US-4,908,112	03-13-1990	Pace	
	A16	US-4,963,498	10-16-1990	Hillman et al.	
	A17	US-4,992,312	02-12-1991	Frisch	
	A18	US-5,032,381	07-16-1991	Bronstein et al.	
	A19	US-5,085,562	02-04-1992	Van Lintel	
	A20	US-5,088,515	02-18-1992	Kamen	
	A21	US-5,096,388	03-17-1992	Weinberg	
	A22	US-5,126,022	06-30-1992	Soane et al.	
	A23	US-5,126,115	06-30-1992	Fujita et al.	
	A24	US-5,140,161	08-18-1992	Hillman et al.	

Examiner	Date
Signature	Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional).
Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04.

Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

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Substitute for form 1449A/PTO					Complete if Known
INFORMATION DISCLOSURE				Application Number	09/800,435
				Filing Date	March 5, 2001
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Stephen R. Quake
				Art Unit	1631
	(use as many she	eets as	necessary)	Examiner Name	Channing Mahatan
Sheet	2	of	15	Attorney Docket Number	20174C-012300US

			U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A25	US-5,164,558	11-17-1992	Huff et al.	
	A26	US-5,164,598	11-17-1992	Hillman et al.	
	A27	US-5,171,132	12-15-1992	Miyazaki	
	A28	US-5,224,843	07-06-1993	Van Lintel	*
	A29	US-5,259,737	11-09-1993	Kamisuki et al.	
	A30	US-5,265,327	11-30-1993	Faris et al.	,
	A31	US-5,271,724	12-21-1993	van Lintel	
	A32	US-5,290,240	03-01-1994	^ Horres, Jr.	
	A33	US-5,336,062	08-09-1994	Richter	
	A34	US-5,346,372	09-13-1994	Naruse et al.	
	A35	US-5,375,979	12-27-1994	Trah	
	A36	US-5,376,252	12-27-1994	Ekstrom	
	A37	US-5,400,741	03-28-1995	DeTitta et al.	
	A38	US-5,423,287	06-13-1995	Usami et al.	
	A39	US-5,434,049	07-18-1995	Okuno et al.	
	A40	US-5,452,878	09-26-1995	Gravesen et al.	
	A41	US-5,486,335	01-23-1996	Wilding et al.	
	A42	US-5,498,392	03-12-1996	Wilding et al.	
	A43	US-5,500,071	03-19-1996	Kaltenbach et al.	**************************************
	A44	US-5,512,131	04-30-1996	Kumar et al.	
	A45	US-5,529,465	06-25-1996	Zengerle et al.	
	A46	US-5,558,998	09-24-1996	Hammond et al.	
	A47	US-5,580,523	12-03-1996	Bard	
,	A48	US-5,589,136	12-31-1996	Northrup et al.	

Examiner Signature Date Considered

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Substitute for form 1449A/PTO					Complete if Known
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	09/800,435
			SCLOSURE	Filing Date	March 5, 2001
			PPLICANT	First Named Inventor	Stephen R. Quake
				Art Unit	1631
	(use as many sh	eets as	s necessary)	Examiner Name	Channing Mahatan
Sheet	3	of	15	Attorney Docket Number	20174C-012300US

U.S. PATENT DOCUMENTS Document Number								
Examiner Initials*	Cite No.1	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	A49	US-5,593,130	01-14-1997	Hansson et al.	•			
	A50	US-5,632,876	05-27-1997	Zanzucchi et al.				
	A51	US-5,641,400	06-24-1997	Kaltenbach et al.				
	A52	US-5,642,015	06-24-1997	Whitehead et al.				
	A53	US-5,659,171	08-19-1997	Young et al.				
	A54	US-5,660,370	08-26-1997	Webster				
	A55	US-5,661,222	08-26-1997	Hare				
	A56	US-5,681,024	10-28-1997	Lisec et al.				
	A57	US-5,702,618	12-30-1997	Saaski et al.				
	A58	US-5,705,018	01-06-1998	Hartley	,			
	A59	US-5,716,852	02-10-1998	Yager et al.				
	A60	US-5,726,751	03-10-1998	Altendorf et al.				
•	A61	US-5,750,015	05-12-1998	Soane et al.				
	A62	US-5,757,482	05-26-1998	Fuchs et al.				
	A63	US-5,759,014	06-02-1998	Van Lintel				
•	A64	US-5,775,371	07-07-1998	Pan et al.				
	A65	US-5,788,468	08-04-1998	Dewa et al.				
	A66	US-5,800,690	09-01-1998	Chow et al.				
	A67	US-5,833,926	11-10-1998	Wurzel et al.				
	A68	US-5,836,750	11-17-1998	Cabuz				
-	A69	US-5,837,200	11-17-1998	Diessel et al.				
	A70	US-5,842,787	12-01-1998	Kopf-Sill et al.				
	A71	US-5,852,495	12-22-1998	Parce				
-	A72	US-5,856,174	01-05-1999	Lipshutz et al.				

Examiner Signature	Date Considered	

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Substitute fo	or form 1449A/PTO)		Complete if Known			
				Application Number	09/800,435		
			SCLOSURE	Filing Date	March 5, 2001		
STATEMENT BY APPLICANT				First Named Inventor	Stephen R. Quake		
				Art Unit	1631		
· (u	(use as many sheets as necessary)		Examiner Name	Channing Mahatan			
Sheet 4	1	of	15	Attorney Docket Number	20174C-012300US		

			U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
•	A73	US-5,863,502	01-26-1999	Southgate et al.	
	A74	US-5,863,801	01-26-1999	Southgate et al.	
	A75	US-5,869,004	02-09-1999	Parce et al.	
	A76	US-5,875,817	03-02-1999	Carter	
	A77	US-5,876,187	03-02-1999	Afromowitz	
•	A78	US-5,880,071	03-09-1999	Parce et al.	
	A79	US-5,904,824	05-18-1999	Oh	`
	A80	US-5,932,799	08-03-1999	Moles	
	A81	US-5,942,443	08-24-1999	Parce et al.	
	A82	US-6,007,309	12-28-1999	Hartley	
	A83	US-6,043,080	03-28-2000	Lipshutz et al.	
	A84	US-6,117,634	09-12-2000	Langmore et al.	
•	A85	US-6,123,769	09-26-2000	Sanjoh	
	A86	US-6,155,282	12-05-2000	Zachary et al.	
•	A87	US-6,174,365 B1	01-16-2001	Sanjoh	
	A88	US-6,221,654 B1	,04-24-2001	Quake et al.	
	A89	US-6,296,673 B1	10-02-2001	Santarsiero et al.	
	A90	US-2001-0027745 A1	10-11-2001	Weigl et al.	
	A91	US-2001-0029983 A1	10-18-2001	Unger et al.	
	A92	US-2001-0041357 A1	11-15-2001	Fouillet et al.	
	A93	US-6,345,502 B1	02-12-2002	Tai et al.	
	A94	US-2002-0037499 A1	03-28-2002	Quake et al.	
	A95	US-6,409,832 B2	06-25-2002	Weigl et al.	
	A96	US-6,540,895 B2	04-01-2003	Quake et al.	

Examiner Signature Date Considered	
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Substitu	te for form 1449A/PT	0		Complete if Known			
				Application Number	09/800,435		
INFO	DRMATION	l Di	SCLOSURE	Filing Date	March 5, 2001		
STA	STATEMENT BY APPLICANT			First Named Inventor	Stephen R. Quake		
				Art Unit	1631		
	(use as many sheets as necessary)			Examiner Name	Channing Mahatan		
Sheet	5	of	15	Attorney Docket Number	20174C-012300US		

			U.S. PATENT DO	CUMENTS	
		Document Number			
Examiner Initials*	Cite No.1	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A97	US-2004-0115838 A1	06-17-2004	Quake et al.	•
	A98	US-6,767,706 B2	07-27-2004	Quake et al.	
	A99	US-2004-0248167 A1	12-09-2004	Quake et al.	
	A100	US-6,833,242 B2	12-21-2004	Quake et al.	
	A101	US-2005-0123947 A1	06-09-2005	Quake et al.	
	A102	US-6,977,145 B2	12-20-2005	Fouillet et al.	

Examiner Signature	Date Considered	

Substitute for form 1449A/PTO				Complete if Known				
				Application Number	09/800,435			
INFO	DRMATION	DIS	SCLOSURE	Filing Date	March 5, 2001			
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Stephen R. Quake			
			,	Art Unit	1631			
	(use as many sheets as necessary)			Examiner Name	Channing Mahatan			
Sheet	6	of	15	Attorney Docket Number	20174C-012300US			

			F	OREIGN PA	TENT DOCUM	ENTS		
Examiner Initials*	Cite No. ¹	Foreig Country Code ³	gn Patent Docume · Number⁴	ent Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T-5
	B1	. EP	0 592 094	A2	04-13-1994	International Business Machines Corporation		
	B2	EP	0 703 364	A1	03-27-1996	Fraunhofer- Gesellschaft Zur Förderung Der Angewandten Forschung E.V.		
	В3	, Eb	0 706 004	A2	04-10-1996	Bayer Corporation		
	B4	EP	0 745 682	B1	12-04-1996	. Bayer AG		
	B5	EP	0 778 351	B1	06-11-1997	Hitachi, Ltd.		
	В6	EP	0 779 436	A2	06-18-1997	Frank T. Hartley		
	В7	EP	0 829 360	A2	03-18-1998	Xerox Corporation		
	В8	EP	0 845 603	A1	06-03-1998	Xerox Corporation		
	B9	EP	0 999 055	A2	05-10-2000	Samsung Electronics Co., Ltd.		
	· B10	GB	2 155 152	Α	09-18-1985	Allied Corporation		
	B11	GB	2 264 296	Α	08-25-1993	Zortech International Limited		0
	B12	GB	2 264 496	A	09-01-1993	United States Department of Energy		
	B13	GB	2 308 460	Α	06-25-1997	Daewoo Electronics Co., Ltd.		
	B14	wo	91/13338	A2	09-05-1991	Hatfield Polytechnic Higher Education Corporation		0
	B15	wo	91/15750	A1	10-17-1991	Carrimed Ltd.		
	B16	wo	94/05414	A1	03-17-1994	wo	-	
	B17	wo	95/33846	A1	12-14-1995	Affymax Technologies N.V.		

Signature	Examiner Signature		Date Considered		
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Substitu	te for form 1449A/PT	O		Complete if Known			
				Application Number	09/800,435		
	•		SCLOSURE	Filing Date	March 5, 2001		
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Stephen R. Quake		
				Art Unit	1631		
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Sheet	7	of	15	Attorney Docket Number	20174C-012300US		

			· F	OREIGN PA	TENT DOCUMENTS				
Examiner Initials*	Cite No.1	Foreig Country Code ³	n Patent Docum	ent Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶	
	B18	wo	95/33853	A1	12-14-1995	University of Tennessee Research Corporation			
	B19	wo	97/02357	A1	01-23-1997	Affymetrix, Inc.			
-	B20	wo	97/38300	A1	10-16-1997	Soane Biosciences			
	B21	wo	98/07069	A1	02-19-1998	The Regents Of The University Of Michigan			
	B22	wo	98/08931	A1	03-05-1998	BTG USA Inc.			
	B23	wo .	99/00655	A2	01-07-1999	Immunetics			
	B24	wo	99/04361	. A1	01-28-1999	Diversified Scientific, Inc.			
	B25	wo	99/17093	A1	04-08-1999	The Regents Of The University Of Michigan			
	B26	wo	99/52633	A1	10-21-1999	Lumenal Technologies, L.P.			
	B27	wo	00/00678	A1	01-06-2000	University Of Washington			
	B28	wo	00/43748	A1	07-27-2000	YSI Incorporated			
	B29	wo	00/60345	A1	10-12-2000	University Of Alabama At Birmingham Research Foundation			
<u> </u>	B30	wo ·	01/09595	A2/A3	02-08-2001	Emerald Biostructures, Inc.			

Examiner Signature	Date Considered		

Substitute for form 1449B/PTO		Complete if Known
INFORMATION DISCLOSUR	Application Number	09/800,435
INFORMATION DISCLOSUR	Filing Date	March 5, 2001
STATEMENT BY APPLICAN	First Named Inventor	Stephen R. Quake
•	Art Unit	1631
(use as many sheets as necessary)	Examiner Name	Channing Mahatan
Sheet 8 of 15	Attorney Docket Number	20174C-012300US

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
**	C1	AFFHOLTER, JOSEPH et al., "Engineering A Revolution," Chemistry in Britain, pp. 48-51, April 1999	
	C2	AHN, CHONG H. et al., "Fluid Micropumps Based On Rotary Magnetic Actuators," Proceedings of 1995 IEEE Micro Electro Mechanical Systems Workshop (MEMS '95), Amsterdam, Netherlands, pp. 408-412, January 29 - February 2, 1995	
	C3	ARNOLD, FRANCES H., "Design By Directed Evolution," Accounts of Chemical Research, Vol. 31, No. 3, pp. 125-131, 1998	•
	C4	ASHKIN, A. et al., "Optical Trapping And Manipulation Of Single Cells Using Infrared Laser Beams," Nature, Vol. 330, No. 24, pp. 769-771, December 31, 1987	
	⁻ C5	ASHKIN, A. et al., "Optical Trapping And Manipulation Of Viruses And Bacteria," Science, Vol. 235, pp. 1517-1520, March 20, 1987	
	C6	BEIN, THOMAS, "Efficient Assays For Combinatorial Methods For The Discovery Of Catalysts," Angew. Chem. Int. Ed., Vol. 38, No. 3, pp. 323-326, 1999	
	C7	BELGRADER, PHILLIP et al., "Rapid Pathogen Detection Using A Microchip PCR Array Instrument," Clinical Chemistry, Vol. 44, No. 10, pp. 2191-2194, 1998	
	C8	BENARD, W. L. et al., "A Titanium-Nickel Shape-Memory Alloy Actuated Micropump," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 361-364, June 16-19, 1997	
	C9	BRECHTEL, R. et al., "Control Of The Electroosmotic Flow By Metal-Salt-Containing Buffers," Journal of Chromatography A, Vol. 716, pp. 97-105, 1995	
-	C10	BRUSH, MICHAEL, "Automated Laboratories," The Scientist, Vol. 13, No. 4, 10 pages, February 15, 1999	
	C11	BRYZEK, JANUSZ et al., "Micromachines On The March", IEEE Spectrum, Vol. 31, No. 5, pp. 20-31, May 1994	
	C12	BUCHAILLOT, LIONEL et al., "Silicon Nitride Thin Films Young's Modulus Determination By An Optical Non Destructive Method," Jpn. J. Appl. Phys., Vol. 36, Part 2, No. 6B, pp. L794-L797, June 15, 1997	
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STATEMENT BY APPLICANT				First Named Inventor	Stephen R. Quake
				Art Unit	1631
(use as many sheets as necessary)				Examiner Name	Channing Mahatan
Sheet	9	of	15	Attorney Docket Number	20174C-012300US

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